



# HAND and FOOT OPERATED INDUSTRIAL SWITCHES



**MICRO SWITCH**

FREEPORT, ILLINOIS

A DIVISION OF HONEYWELL



# Industrial Switches

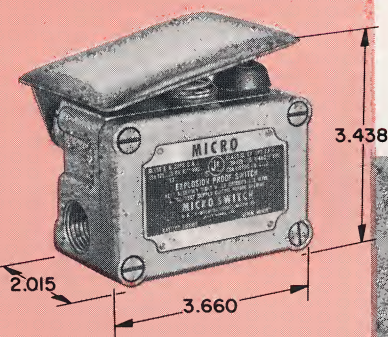
## FOR MANUAL and FOOT OPERATION

The MICRO SWITCH line of precision snap-action switches offers many variations for hand and foot operation. Each switch is designed to human-factors standards and will give exceptional service throughout unusually long life. Care in the selection of the proper switch will insure maximum benefit for your application. The following points can be considered.

- ▶ Exposure to oil, dirt, water, grit, etc.
- ▶ Explosive conditions
- ▶ Electrical needs
- ▶ Circuitry arrangement
- ▶ Optimum operating conditions
- ▶ Mounting space and position
- ▶ Shock and impact hazards

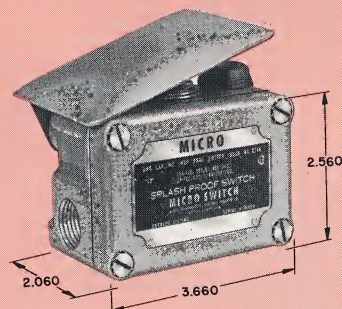
### EXPLOSION-PROOF SWITCH

The rugged EX-AR50 explosion-proof switch is ideal for control of power equipment in hazardous areas. The smooth stainless steel paddle has over 11 square inches of actuating surface for fast, easy operation. The EX-AR50 meets requirements for UL Class I, Groups C and D; Class II, Groups E, F and G and NEMA Types 7 and 9.



### SPLASH-PROOF SWITCH

The OP-AR50 is constructed similarly to the EX-AR50 except that it is sealed and not explosion-proof. A gasket between the heavy aluminum housing and cover plates seals against liquid splash conditions. The OP-AR50 meets NEMA requirements for Type 1, 2, 3, 4 and 5 enclosures.



Both the EX-AR50 and OP-AR50 have a single-pole double-throw contact arrangement. They can be mounted from the back, bottom or right side using a special bracket furnished with each switch.

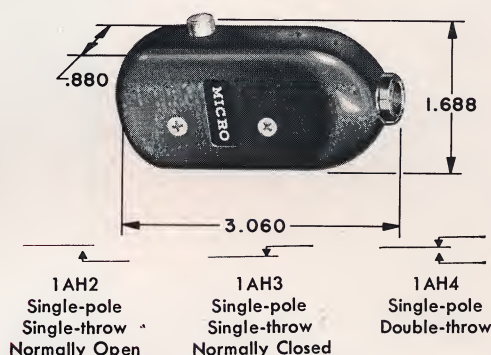
Electrical Rating: Underwriters' Laboratories listed for 15 amps 125, 250 or 480 vac; 1/2 amp 125 vdc; 1/4 amp 250 vdc.

### PENDANT SWITCHES

"AH" modern-styled hand switches are adaptable to a variety of applications. They are designed for controlling equipment from several different locations with the same switch. Mounting is by power cord only. These compact, low-force switches are designed for trouble-free operation. Catalog listings and contact variations are given below. Electrical Rating: Underwriters' Laboratories Listed for 10 amps 125 or 250 vac; 3/4 hp 115 vac, 1 1/2 hp 230 vac.

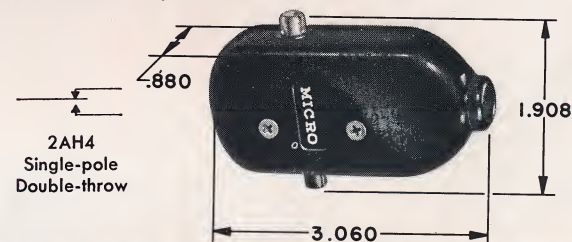
#### Momentary-Contact Switches

Contact is made only while button is held depressed. Contact is broken instantly when button is released.



#### Maintained-Contact Switches

Contact is made when the metal button is depressed. Contact is broken when the plastic "reset" button is pressed.



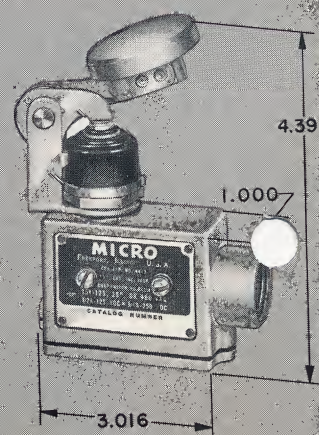
### ENCLOSED SWITCHES

These finger-tip operated switches feature low operating force which speeds productivity with lighter type work. The operating lever of these switches is completely adjustable. The lever with its 1 1/2" diameter button is adjustable through 180° vertically and 360° horizontally. Switches are sealed with an elastomer plunger boot and a gasket between the cover plate and housing. Switches meet N.E.M.A. requirements for type 1, 2, 3, 4 and 5 enclosures.

#### BZE-2RN4 General Purpose Switch

This die-cast aluminum housed switch is side mounted but can be converted to bottom mount with furnished flange plate. The basic switching unit is single-pole double-throw.

Electrical Rating: Underwriters' Laboratories listed for 15 amps 125, 250 or 480 vac; 1/2 amp 125 vdc; 1/4 amp 250 vdc.

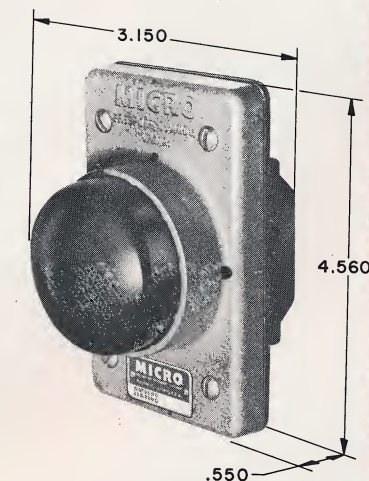




## PALM SWITCHES

"PH" momentary-contact switches feature a large  $2\frac{1}{4}$ " diameter button which is available in four different colors. The large surface area provides fast identification and an easy target for the operator's hand. A positive contact action imparts an excellent "feel" to actuation. The high impact button is available in black, red, green and yellow. Oiltight seals are located between the button and plunger mechanism and between the switch and mounting surface. Switches meet requirements for N.E.M.A. Type 1 and 2 enclosures and mount on standard J.I.C. "FD" and "FS" boxes.

"PH" switches have two double-break circuits, one normally closed, the other normally open. Contact design prevents cross-circuiting. Contacts are removable and can be replaced if they become worn.



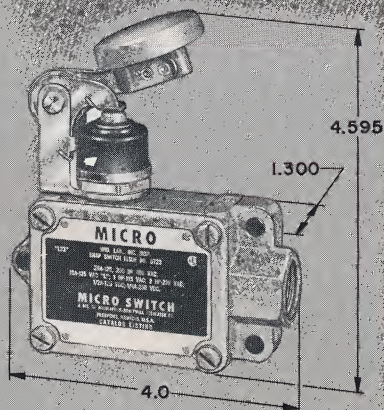
Pilot Duty Rating: 6 amps normal, 60 amps inrush at 125 vac; 3 amps normal, 30 amps inrush at 250 vac; 1.5 amps normal, 15 amps inrush at 480 vac; 1.2 amps normal, 12 amps inrush at 600 vac.

Catalog Listing	Button Color
2PH1	Black
2PH2	Red
2PH3	Green
2PH4	Yellow

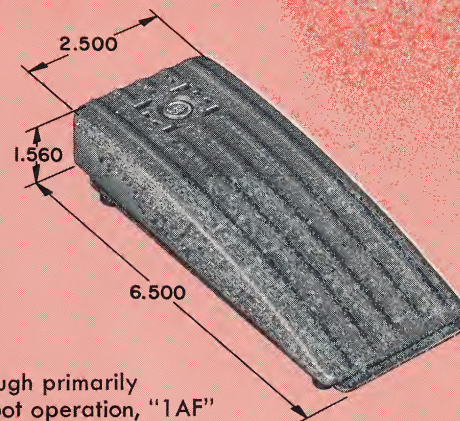
### BAF1-2RN4-RH (-LH) High Capacity Switch

The BAF1-2RN4 has a 20 ampere capacity and up to 75 ampere inrush capacity. It has rugged 3-hole mounting and the basic switching unit can be replaced without dismounting the housing. Contact arrangement is single-pole double-throw.

Electrical Rating: Underwriters' Laboratories listed for 20 amps 125, 250 or 480 vac;  $\frac{1}{2}$  amp 125 vdc;  $\frac{1}{4}$  amp 250 vdc; 1 hp 115 vac; 2 hp 230 vac; 10 amps 125 vac lamp load.



## FOOT SWITCHES



Although primarily for foot operation, "1AF" switches are used widely for hand, arm, elbow, knee or whole body operation. The total pedal travel is  $\frac{1}{4}$ -inch and operating force is  $5\frac{1}{2}$  pounds. These switches are sturdily constructed of cold-rolled steel. The pedal has a non-slip wrinkle finish. The base has four non-skid feet and three slots for fixed mounting. They are available with a variety of contact arrangements and some have neon indicating lamp, cord and plug. The neon indicating lamp is on when the switch is in the unactuated position and is a valuable aid when used in dark areas such as photographic dark rooms. "1AF" switches are listed by Underwriters' Laboratories for 10 amps 125 or 250 vac;  $\frac{1}{2}$  hp 115 vac;  $1\frac{1}{2}$  hp 230 vac.

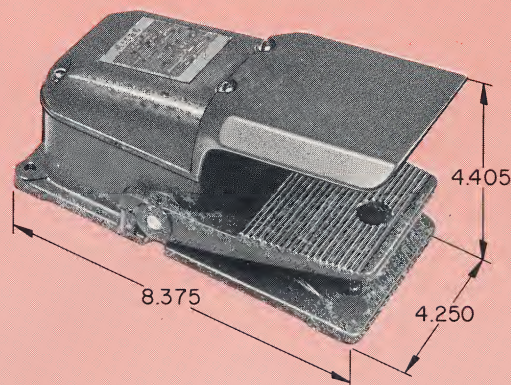
1AF1  
Single-pole,  
normally-open.  
6-foot cord,  
plug and neon light.

1AF7  
Single-pole,  
normally-open.  
4-foot cord W/O plug.  
Neon light.

1AF4  
Single-pole  
double-throw.  
No cord or light.

1AF12  
Double-pole  
double-throw.  
No cord or light.

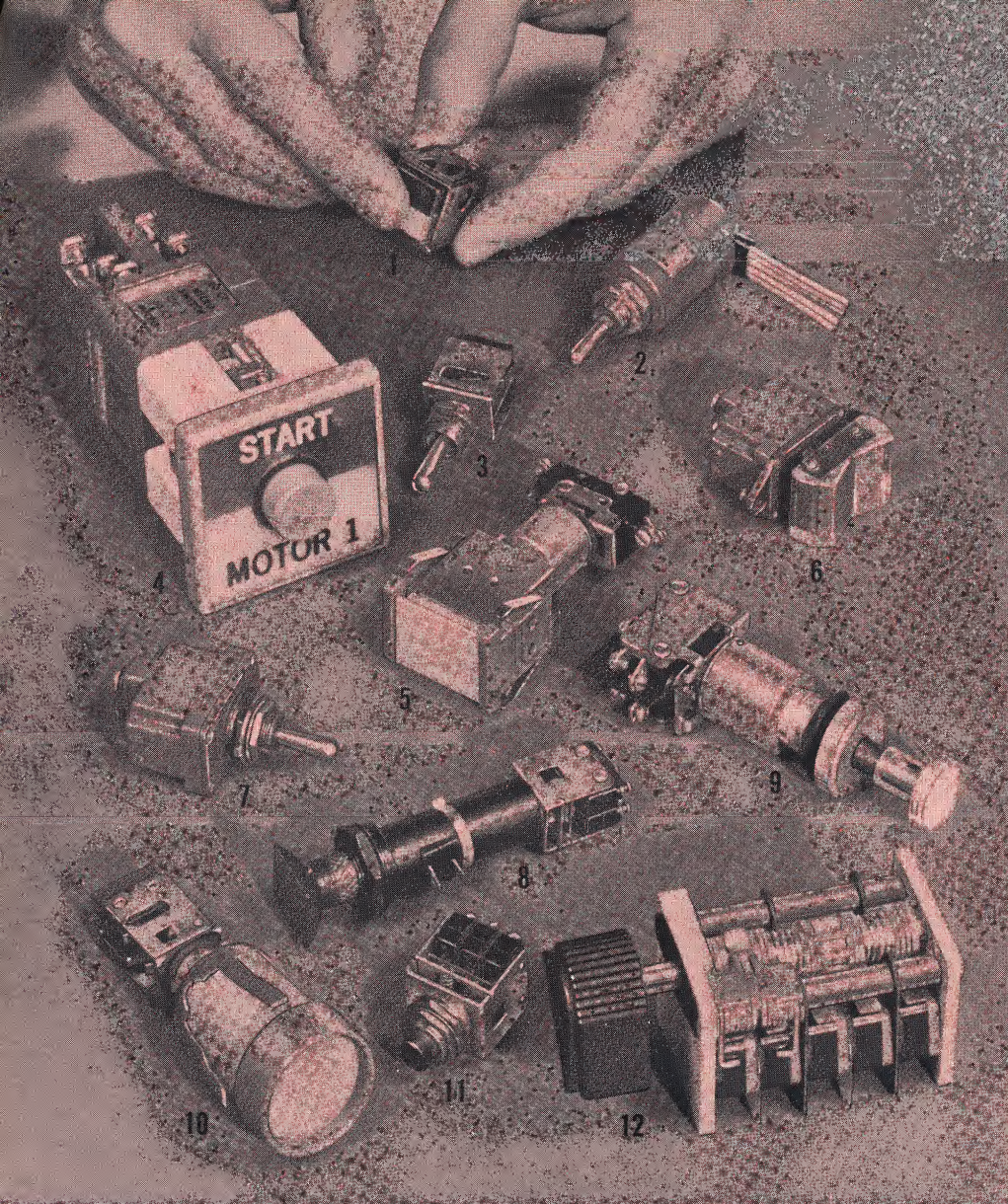
## SEALED, HEAVY-DUTY FOOT SWITCH



The 5AF1 foot switch is a very rugged, cast-iron enclosed foot-operated switch. A guard prevents falling objects from injuring the operator's foot or tripping the switch. The unit is oil-tight. The operating point of the wide non-slip treadle can be varied by a single screw adjustment. The contact arrangement is two-circuit double-break. The 5AF1 meets the requirements for N.E.M.A. Type 1, 2 and 3 enclosures.

Electrical Rating: 20 amps 120, 240 or 480 vac;  $\frac{3}{4}$  hp 115 vac;  $1\frac{1}{2}$  hp 230 vac; 1 amp 125 vdc;  $\frac{1}{2}$  amp 250 vdc.





1. Miniature lighted pushbutton switch . . . indication and control in less than one cubic inch
2. Magnetic hold-in toggle switch . . . completely sealed construction
3. Multi-circuit toggle switch assembly . . . features gold or silver contacts
4. Coordinated Manual Control . . . pushbutton operation and lighted color coded display
5. Modular lighted pushbutton switch . . . 20 different switch modules available
6. Rocker-actuator switch . . . toggle switch versatility with pushbutton control
7. Sealed 3-position toggle switch . . . complete circuitry selection
8. Lighted pushbutton switch . . . small size - easy mounting
9. Heavy-duty pushbutton switch . . . rugged construction and oiltight panel seal
10. Modular lighted pushbutton switch . . . companion to No. 5 above
11. Multi-circuit miniature pushbutton switch . . . features good feel of switching action
12. Rotary-selector switch assembly . . . available with up to 8 poles



**MICRO SWITCH**

FREEMONT, ILLINOIS

A DIVISION OF HONEYWELL

IN CANADA: HONEYWELL CONTROLS LIMITED, TORONTO 17, ONTARIO

## PANEL SWITCHES...DESIGNED TO MEET HUMAN-FACTORS ENGINEERING REQUIREMENTS

In addition to the industrial hand and foot switches described in this bulletin MICRO SWITCH offers a complete selection of precision panel switches for commercial, aerospace and electronic use. Hundreds of available variations meet nearly every Human-Factors need. There are several varieties of circuitry, electrical capacity and terminals. For use under severe environmental conditions, there are heavy-duty sealed versions . . . for customized panels, multi-circuit miniaturized lighted and unlighted pushbutton designs.

### ENGINEERING SERVICE

Our staff of factory-trained field engineers is ready to help you with your switching problems, whether involving manual switches or any other type of precision switch. Their years of experience can be a great help and money-saver to you.

### AUTHORIZED DISTRIBUTORS

Authorized Distributors of MICRO SWITCH products are located in key cities throughout the U.S. They carry hundreds of variations of precision snap-action switches in stock for quick delivery.